

Claims

What is claimed is:

- 5 1. A hydraulic jack device for aligning boiler water tube panels to weld the panels together, the device comprising:
 - a hydraulic jack comprising a hydraulic cylinder and a movable piston with an outer head adapted for applying force sufficient to move a boiler water tube panel;
 - 10 a rigid metal tab adapted for attachment by a weld to a web between a first and second of a pair of tubes in a first boiler water tube panel, the metal tab having a pair of spaced openings transversely through the metal tab;
 - 15 a rigid bracket comprising a tab sleeve adapted to fit over the metal tab, the tab sleeve having a pair of mating spaced openings matched and aligned with the pair of spaced openings in the metal tab, the rigid bracket further comprising a pair of pins attached thereto by chains, the pair of pins adapted to fit in the mating openings to secure the tab sleeve to the tab, the rigid bracket further comprising a flat plate secured to and extending orthogonally from the tab sleeve, the flat plate adapted to rest against and span a series of water tubes of a first water tube panel having the metal tab attached thereto, the rigid bracket further comprising a jack sleeve rigidly attached to the tab sleeve, the
 - 20 jack sleeve extending away from the first water tube panel, the jack sleeve having a means for receiving and housing the hydraulic jack therein, the jack sleeve having a means for adjusting a position of the hydraulic jack within the jack sleeve so that the outer head of the hydraulic jack is adapted to contact a second boiler water tube panel and

adapted to align a first and a second adjacent boiler water tube panels for welding a first and a second boiler water tube panels together.

2. The device of claim 1 wherein the rigid bracket further comprises a rigid
5 angled support arm between the jack sleeve and the flat plate.

3. The device of claim 1 wherein the hydraulic jack further comprises a bolt
extending therefrom to attach the hydraulic jack to the jack sleeve and the means for
adjusting a position of the hydraulic jack within the jack sleeve comprises a slot in the
10 jack sleeve extending orthogonally away from the tab plate so that the bolt from the
hydraulic jack fits within and is adapted to slide within the slot to adjust the position of
the hydraulic jack, which position is secured by tightening the bolt.

4. The device of claim 1 wherein the weld attaching the metal tab to a first
15 boiler water tube panel comprises a weld along only one side of the metal tab so that the
metal tab is adapted to be broken away and reused on another boiler water tube panel.